



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

ml

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,035	06/23/2004	Takashi Aramaki	L8638.04103	2232

24257 7590 02/23/2007  
STEVENS DAVIS MILLER & MOSHER, LLP  
1615 L STREET, NW  
SUITE 850  
WASHINGTON, DC 20036

EXAMINER

GOETZE, SIMON A

ART UNIT PAPER NUMBER

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/500,035		ARAMAKI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Simon A. Goetze		2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004 and 20 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code on Page 5, Lines 14-15 and Page 6, Lines 12-13. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

Art Unit: 2617

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. **Claims 1 and 4-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Carlsson et al. (US Patent 5,970,408)** in view of **Bender et al. (US Patent 6,888,805)**.

Consider **claim 1**, Carlsson et al. discloses a subnet connection switching communication system made to switch connections of a plurality of terminals from one gate constituting a subnet to the other gate constituting a subnet different from said subnet for making communications, said plurality of terminals being grouped into a plurality of groups and the connections are switched said group by said group (*the mobile radio base station defines groups of users it's circuitry initiates switching of the connections for the entire group – Figures 1, 5, and 6 – Column 6, Lines 32-40; Column 7, Lines 9-20; Column 8, Lines 10-22; Column 12, Lines 16-24 and 31-36*).

However, Carlsson et al. fails to disclose that the times are staggered.

In related prior art, Bender et al. discloses a time division multiplexing scheme where the users in a particular group only transmit in their specified time slot. Figure 3 shows the staggering of this communication (*Figure 3 – Abstract; Column 2, Lines 40-53 and 65-67; Column 5, Lines 39-49; Column 11, Lines 52-67*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Bender et al. with those of Carlsson et al. in

Art Unit: 2617

order to provide a method for managing communications which reduces load on the network and communication interference.

Consider **claim 4**, as applied to claim 1 above, Carlsson et al. as modified by Bender et al. further discloses that said plurality of terminals are located in a mobile body to move with said mobile body (*train – Column 6, Lines 32-40*).

Consider **claim 5**, as applied to claim 4 above, Carlsson et al. as modified by Bender et al. discloses that said mobile body includes external communication means for making communication with the one gate or the other gate and internal communications means for making communications with said plurality of terminals (*Column 8, Lines 10-22; Column 12, Lines 16-24*),

said plurality of terminals making the connections through said external communication means and said internal communication means with the one gate or the other gate (*Column 11, Lines 46-67; Column 12, Lines 31-36*).

Consider **claim 6**, as applied to claim 4 above, Carlsson et al. as modified by Bender et al. discloses that said mobile body is a train including a plurality of cars, and a plurality of terminals located in a at least one of said plurality of cars are set as one of said groups, and the grouping is made with said each car (*Figures 1, 5, and 6 – Column 6, Lines 32-40; Column 7, Lines 9-20; Column 8, Lines 10-22*).

6. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Carlsson et al.** (US Patent 5,970,408) in view of **Bender et al.** (US Patent 6,888,805), further in view of **Meier** (US Patent Application Publication 2005/0180345).

Consider **claim 2**, as applied to claim 1 above, Carlsson et al. as modified by Bender et al. discloses the grouping of the mobile devices, but fails to disclose that the grouping is conducted by a VLAN, and an instruction for the connection switching is sent for said each group through the use of a function of said VLAN.

In related prior art, Meier discloses a mobile VLAN and that the grouping is conducted by a VLAN, and an instruction for the connection switching is sent for said each group through the use of a function of said VLAN (*Abstract; Page 1, Paragraphs 0005-0008; Page 4, Paragraph 0053; Page 8, Paragraphs 0122-0124*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Meier with those of Carlsson as modified by Bender et al. in order to efficiently group and manage mobile devices.

7. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Carlsson et al.** (US Patent 5,970,408) in view of **Bender et al.** (US Patent 6,888,805), further in view of **Gavrilovich** (US Patent 6,026,277).

Consider **claim 3**, as applied to claim 1 above, Carlsson et al. as modified by Bender et al. discloses that a handoff is made which does not interrupt the communication, but fails to specifically disclose that an overlap range is provided where a communicable range connectable to the one gate and a communicable range connectable to the other gate overlap with each other, and all the connections of said plurality of terminals are switched within a time period in which said plurality of terminals exist in said overlap range.

In related prior art, Gavrilovich discloses moving base station which effectuates handoffs and that an overlap range is provided where a communicable range connectable to the one gate and a communicable range connectable to the other gate overlap with each other, and all the connections of said plurality of terminals are switched within a time period in which said plurality of terminals exist in said overlap range (*Column 3, Lines 37-40; column 9, Lines 10-24; Column 11, Lines 12-26*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Gavrilovich with those of Carlsson et al. as modified by Bender et al. in order to provide uninterrupted service to a group of users.

### ***Conclusion***

8. The prior art made of record and not relied upon and is considered pertinent to applicant's disclosure is listed below.

**US 5,867,785      Averbuch et al.**

Method for Providing Communication Service to Communication Units Located within a Common Carrier Transportation Device.

Art Unit: 2617

9. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Simon A. Goetze whose telephone number is (571) 270-1113. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm and Friday from 7:30am to 4:00pm.

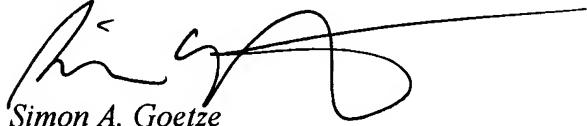
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.



Art Unit: 2617

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.



Simon A. Goetze  
S.A.G./sag

February 20, 2007



NICK CORSARO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600